

SWOSU Student Wins Best Poster at Summer Research Symposium

07.30.2012

Nathan Bernhardt, SWOSU student from Thomas, recently won the best poster presentation at the Oklahoma IDeA Network of Biomedical Research Excellence (OK-INBRE) summer research symposium held at the University of Oklahoma Health Sciences Center in Oklahoma City. Bernhardt is pictured with his research mentor, Dr. Anne Kasus-Jacobi, from the University of Oklahoma Health Sciences Center.

Southwestern Oklahoma State University biology student Nathan Bernhardt of Thomas recently won the best poster presentation at the Oklahoma IDeA Network of Biomedical Research Excellence (OK-INBRE) summer research symposium held at the University of Oklahoma Health Sciences Center in Oklahoma City.

As one of two recipients of this award, Bernhardt will represent SWOSU and OU-HSC during the 2013 Research Day at the State Capitol in Oklahoma City.

Bernhardt has been working with Dr. Anne Kasus-Jacobi on researching the molecular mechanism of drug transport in the eye with the intention to uncover the mode of action of therapeutics for macular degeneration, a major cause of vision loss in humans.

Reactive oxygen species produced by cells in the eye trigger protein dysfunction, cell death and vision loss. Moreover, researchers have shown that introduction of a therapeutic compound called carbinine slow down the process of cell death seen in patients with macular degeneration.

To better understand how carbinine traffics into cells inside the eye, Bernhardt and Dr. Kasus-Jacobi examined two potential transporters—PepT1 and 2—and characterized their biophysical properties. A progress report of this research was presented during the 2012 OU- HSC summer undergraduate research symposium and judges considered it meritorious for the award.